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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/043,436	01/10/2002	Junming Lc	0975.1005-018	3843
21005 75	590 10/07/2004		EXAM	INER
HAMILTON,	BROOK, SMITH & RE	GAMBEL, PHILLIP		
530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			ART UNIT	PAPER NUMBER
			1644	· · · · · · · · · · · · · · · · · · ·

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/043,436	LE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Phillip Gambel	1644				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	i6(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed  s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
2a) This action is <b>FINAL</b> . 2b) ⊠ This	☐ This action is <b>FINAL</b> . 2b) ☐ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1/3 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the conference of the c	epted or b) objected to by the drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ejected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119	•					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Daltsperson's Patent Browing Review (PTO 948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:					

Art Unit: 1644

## **DETAILED ACTION**

1. The instant application is in sequence compliance for patent applications containing nucleotide sequence and/or amino acid sequence disclosures.

2. The filing date of the instant claims is deemed to be the filing date of the instant application USSN 10/043,436, filed 1/10/02. It does not appear the priority applications provide sufficient written description for treating hepatitis with cA2-specific antibodies.

For example, it appears that the disclosure of "hepatitis pathologies" is limited to the instant claims only.

Page 59, Section (F) of the instant specification discloses "(F) alcohol-induced hepatitis" and not the more generic recitation of "hepatitis pathologies" recited in the instant claims.

It appears that the disclosure of the priority applications is limited to "(F) alcohol-induced hepatitis" and not the more generic recitation of "hepatitis pathologies" recited in the instant claims.

It is noted that entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed. <u>Lockwood v. American Airlines Inc.</u>, 41 USPQ2d 1961 (Fed. Cir. 1977).

If applicant desires priority prior to 2/4/94; applicant is invited to point out and provide documentary support for the priority of the instant claims. Applicant is reminded that such priority for the instant limitations requires written description and enablement under 35 U.S.C. § 112, first paragraph.

3. If applicant desires priority under 35 U.S.C. 120 based upon a previously filed copending application, specific reference to the earlier filed application must be made in the instant application. This should appear as the first sentence of the specification following the title, preferably as a separate paragraph. The status of nonprovisional parent application(s) (whether patented or abandoned) should also be included. If a parent application has become a patent, the expression "now Patent No.\_\_\_\_\_\_\_" should follow the filing date of the parent application. If a parent application has become abandoned, the expression "now abandoned" should follow the filing date of the parent application.

Applicant should amend the first line of the specification to update the status of the priority documents.

4. The application is required to be reviewed and all spelling, TRADEMARKS, and like errors corrected.

Trademarks should be capitalized or accompanied by the TM or ® symbol wherever they appear and be accompanied by the generic terminology. Although the use of trademarks is permissible in patent applications, the proprietary nature of the trademarks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Appropriate corrections are required

Art Unit: 1644

5. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 C.F.R. § 1.75(d)(1) and M.P.E.P. § 608.01(l). Correction of the following is required:

It appears that the disclosure of "hepatitis pathologies" is limited to the instant claims only.

Page 59, Section (F) of the instant specification discloses "(F) alcohol-induced hepatitis" and not the more generic recitation of "hepatitis pathologies" recited in the instant claims.

Applicant is required to amend the specification to provide proper antecedent basis for the claimed recitation of "hepatitis pathologies".

Alternatively, applicant is invited to identify the written support for the claimed recitation of "hepatitis pathologies" in the specification as-filed.

7. Claims 1, 3-5, 11-12 and 14-15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention

It is apparent that the cA2 antibody is required to practice the claimed invention. As a required element, it must be known and readily available to the public or obtainable by a repeatable method set forth in the specification. If it is not so obtainable or available, the enablement requirements of 35 USC 112, first paragraph, may be satisfied by a deposit of the cell line / hybridoma which produces this antibody. See 37 CFR 1.801-1.809.

In addition to the conditions under the Budapest Treaty, applicant is required to satisfy that all restrictions imposed by the depositor on the availability to the public of the deposited material will be irrevocably removed upon the granting of a patent in U.S. patent applications.

Amendment of the specification to recite the date of deposit and the complete name and address of the depository is required. As an additional means for completing the record, applicant may submit a copy of the contract with the depository for deposit and maintenance of each deposit.

If the original deposit is made after the effective filing date of an application for patent, the applicant should promptly submit a verified statement from a person in a position to corroborate the fact, and should state, that the biological material which is deposited is a biological material specifically identified in the application as filed, except if the person is an attorney or agent registered to practice before the Office, in which the case the statement need not be verified. See MPEP 1.804(b).

Art Unit: 1644

Affidavits and declarations, such as those under 37 C.F.R. § 1.131 and 37 C.F.R. § 1.132, filed during prosecution of the parent application do not automatically become a part of this application. Where it is desired to rely on an earlier filed affidavit, the applicant should make the remarks of record in the later application and include a copy of the original affidavit filed in the parent application.

Given the disclosure and the claims encompassing the instant cA2 antibody set forth in U.S. Patent No. 5,919,452; the conditions for the deposit of biological materials under 35 USC 112, first paragraph, with respect to cA2 appear to have been satisfied.

Applicant is required to make the record clear exactly what is the scope of the instantly claimed cA2 and whether applicant has satisfied the deposit requirements under 35 USC 112, first paragraph, for the claimed cA2 antibody.

8. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the "TNF- $\alpha$  specificity"; does not reasonably provide enablement for any "TNF specificity" having such specificities.

The specification does not enable any person skilled in the art to which it pertains, or with which it is most clearly connected, to make and use the invention commensurate in scope with these claims.

Reasonable correlation must exist between the scope of the claims and scope of enablement set forth. The specification does not describe nor enable any "TNF" molecule" other than "TNF $\alpha$ " as the appropriate specificity of the claimed methods, including the claimed cA2 specificity. For example, the cA2 antibody binds TNF- $\alpha$ , not TNF- $\beta$ .

The scope of the claims must bear a reasonable correlation with the scope of enablement. See <u>In re Fisher</u>, 166 USPQ 18 24 (CCPA 1970).

Without such guidance, targeting TNF molecules other than TNF- $\alpha$  in order to treat hepatitis pathologies would be unpredictable and the experimentation left to those skilled in the art is unnecessarily, and improperly, extensive and undue.

9. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for treating "alcohol-induced hepatitis", does not reasonably provide enablement for any "hepatitis pathology".

The specification does not enable any person skilled in the art to which it pertains, or with which it is most clearly connected, to make and use the invention commensurate in scope with these claims.

Reasonable correlation must exist between the scope of the claims and scope of enablement set forth. The specification does not describe nor enable any "hepatitis pathology" other than "alcohol induced hepatitis" as the targeted "hepatitis pathology" of the claimed methods.

It appears that the disclosure of "hepatitis pathologies" is limited to the instant claims only.

Art Unit: 1644

Page 59, Section (F) of the instant specification discloses "(F) alcohol-induced hepatitis" and not the more generic recitation of "hepatitis pathologies" recited in the instant claims.

There is insufficient guidance and direction as to the nature or the targeted endpoints of "hepatitis pathologies" other than treating "alcohol-induced hepatitis".

For example, hepatitis can be caused by hepatitis viruses, alcohol, drugs and non-hepatitis viruses (e.g. infectious mononucleosis, cytomegalovirus). The pathology associated with hepatitis includes hepatocellular necrosis and mononuclear inflammatory infiltrate. There is insufficient objective evidence that the administration of anti-TNF- $\alpha$  antibodies can treat "hepatitis pathologies" as broadly claimed.

The scope of the claims must bear a reasonable correlation with the scope of enablement. See <u>In re Fisher</u>, 166 USPQ 18 24 (CCPA 1970).

Without such guidance, treating any or all "hepatitis pathologies" with TNF- $\alpha$ -specific antibodies would be unpredictable and the experimentation left to those skilled in the art is unnecessarily, and improperly, extensive and undue.

- 10. Claim 15 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 11. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).
- 11. Claims 1-15 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- A) Claims 1, 3-5, 11-12 and 14-15 are indefinite in the recitation of "cA2" because its characteristics are not known. The use of "cA2" monoclonal antibody as the sole means of identifying the claimed antibody renders the claim indefinite because "cA2" is merely a laboratory designation which does not clearly define the claimed product, since different laboratories may use the same laboratory designation s to define completely distinct hybridomas / cell lines.

Applicant is invited to clarify the metes and bounds of the claimed cA2 antibody.

B) Claims 1-15 are indefinite in the recitation of "hepatitis pathologies" because the metes and bounds of said "pathologies" are ill-defined and ambiguous.

As pointed out above, it appears that the disclosure of "hepatitis pathologies" is limited to the instant claims only.

Page 59, Section (F) of the instant specification discloses "(F) alcohol-induced hepatitis" and not the more generic recitation of "hepatitis pathologies" recited in the instant claims.

There is insufficient description of the nature and targeted endpoints of treating "hepatitis pathologies" to apprise the ordinary artisan of the metes and bounds of the claimed "hepatitis pathologies".

Application/Control Number: 10/043,436 Page 6

Art Unit: 1644

C) Applicant is reminded that the amendment must point to a basis in the specification so as not to add any new matter. See MPEP 714.02 and 2163.06

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 13. Claims 1-15 are rejected under 35 U.S.C. § 102(b) as being anticipated by Le et al. (U.S. Patent No. 5,919,452) (see entire document).

Le et al. teach methods of treating TNF- $\alpha$ -mediated diseases, including alcohol-induced hepatitis (see column 35, line 12) with TNF- $\alpha$ -specific antibodies, including recombinant and chimeric antibodies and the cA2 antibody specificity of the instant invention (see entire document, including Summary of the Invention, Detailed Description of the Invention and Claims).

Applicant is reminded that no more of the reference is required than that it sets forth the substance of the invention. The claimed functional limitations would be inherent properties of the referenced methods to treat alcohol-induced hepatitis with recombinant cA2-specific antibodies.

A species anticipates a claim to a genus. See MPEP 2131.02.

- No claim is allowed.
- 15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Gambel whose telephone number is (571) 272-0844. The examiner can normally be reached Monday through Thursday from 7:30 am to 6:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841.

The fax number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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September 29, 2004